



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/715,724	09/19/1996	PHILLIP E. WILSON	6000	4961

7590 03/26/2003

KAREN M DELLERMAN  
BASF CORPORATION  
26 Davis Drive  
Research Triangle Park, NC 27709

EXAMINER
----------

JUSKA, CHERYL ANN

ART UNIT	PAPER NUMBER
----------	--------------

1771

DATE MAILED: 03/26/2003

29

Please find below and/or attached an Office communication concerning this application or proceeding.


AS-29

<b>Notice of Abandonment</b>	Applicati n No.		Applicant(s)	
	08/715,724		WILSON ET AL.	
	Examiner		Art Unit	
	Cheryl Juska		1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

This application is abandoned in view of:

1. ☐ Applicant's failure to timely file a proper reply to the Office letter mailed on \_\_\_\_\_.
  - (a) ☐ A reply was received on \_\_\_\_\_ (with a Certificate of Mailing or Transmission dated \_\_\_\_\_), which is after the expiration of the period for reply (including a total extension of time of \_\_\_\_\_ month(s)) which expired on \_\_\_\_\_.
  - (b) ☐ A proposed reply was received on \_\_\_\_\_, but it does not constitute a proper reply under 37 CFR 1.113 (a) to the final rejection.  
(A proper reply under 37 CFR 1.113 to a final rejection consists only of: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114).
  - (c) ☐ A reply was received on \_\_\_\_\_ but it does not constitute a proper reply, or a bona fide attempt at a proper reply, to the non-final rejection. See 37 CFR 1.85(a) and 1.111. (See explanation in box 7 below).
  - (d) ☐ No reply has been received.
2. ☐ Applicant's failure to timely pay the required issue fee and publication fee, if applicable, within the statutory period of three months from the mailing date of the Notice of Allowance (PTOL-85).
  - (a) ☐ The issue fee and publication fee, if applicable, was received on \_\_\_\_\_ (with a Certificate of Mailing or Transmission dated \_\_\_\_\_), which is after the expiration of the statutory period for payment of the issue fee (and publication fee) set in the Notice of Allowance (PTOL-85).
  - (b) ☐ The submitted fee of \$\_\_\_\_\_ is insufficient. A balance of \$\_\_\_\_\_ is due.  
The issue fee required by 37 CFR 1.18 is \$\_\_\_\_\_. The publication fee, if required by 37 CFR 1.18(d), is \$\_\_\_\_\_.
  - (c) ☐ The issue fee and publication fee, if applicable, has not been received.
3. ☐ Applicant's failure to timely file corrected drawings as required by, and within the three-month period set in, the Notice of Allowability (PTO-37).
  - (a) ☐ Proposed corrected drawings were received on \_\_\_\_\_ (with a Certificate of Mailing or Transmission dated \_\_\_\_\_), which is after the expiration of the period for reply.
  - (b) ☐ No corrected drawings have been received.
4. ☐ The letter of express abandonment which is signed by the attorney or agent of record, the assignee of the entire interest, or all of the applicants.
5. ☐ The letter of express abandonment which is signed by an attorney or agent (acting in a representative capacity under 37 CFR 1.34(a)) upon the filing of a continuing application.
6. ☒ The decision by the Board of Patent Appeals and Interference rendered on 11-21-02 and because the period for seeking court review of the decision has expired and there are no allowed claims.
7. ☐ The reason(s) below:

  
 Cheryl Juska  
 Primary Examiner  
 Art Unit: 1771

Petitions to revive under 37 CFR 1.137(a) or (b), or requests to withdraw the holding of abandonment under 37 CFR 1.181, should be promptly filed to minimize any negative effects on patent term.

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 28

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

*Ex parte* PHILLIP E. WILSON, STANLEY A. MCINTOSH  
AND MATTHEW B. HOYT

Appeal No. 2001-2386  
Application 08/715,724

---

ON BRIEF

---

MAILED

NOV 21 2002

PAT. & T.M. OFFICE  
BOARD OF PATENT APPEALS  
AND INTERFERENCES

Before PAK, OWENS and LIEBERMAN, *Administrative Patent Judges.*

OWENS, *Administrative Patent Judge.*

*DECISION ON APPEAL*

This appeal is from the refusal to allow claims 2-4, 9, 10, 14, 15, 17, 20 and 21, which are all of the claims remaining in the application.

*THE INVENTION*

The appellants claim an acid-dye and coffee stain resistant carpet having fibers made of a polyamide core substantially or completely covered by a sheath of a specified polyamide.

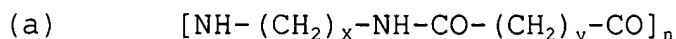
Claims 20 and 2 are illustrative:

20. An acid-dye and coffee stain resistant carpet comprising:

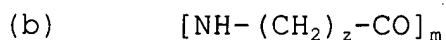
a backing material; and

stain resistant sheath/core bicomponent face fibers with non-round cross-sections affixed in said backing material and bound thereto;

said face fibers comprising: a core of a first polyamide component; and a sheath occupying from about 3 to 9 percent of the fiber and substantially or completely covering said core, said sheath comprising a second polyamide component which is inherently chemically compatible with said first polyamide component, said second polyamide component comprising at least one stain resistant polyamide polymer selected from the group consisting of:



where x and y may be the same or different integers from about 4 to about 30, the sum of x and y is greater than 13, and n is greater than about 40; and



where z is an integer from about 9 to about 30 and m is greater than about 40;

(c) derivatives of (a) or (b) including polymers substituted with one or more sulfonate, halogenate, aliphatic or aromatic functionality; and

(d) copolymers and blends of (a), (b) and (c);

wherein said fiber has a percent steam heatsetting shrinkage value which is about 70% or less of a percent steam heatsetting shrinkage value of an otherwise identical fiber consisting of only said first polyamide component; and

said carpet in an uncolored state having a red drink staining depth of less than 15 CIE  $\Delta E$  units and a coffee staining depth of less than about 10 CIE  $\Delta E$  units.<sup>[1]</sup>

2. The carpet of claim 20, wherein said inherently compatible polyamide component has a concentration of titratable amino end-groups less than 30 milliequivalents per kilogram.

#### THE REFERENCES

Lin	5,447,794	Sep. 5, 1995
Lijten et al. (Lijten)	5,468,555	Nov. 21, 1995

#### THE REJECTION

Claims 2-4, 9, 10, 14, 15, 17, 20 and 21 stand rejected under 35 U.S.C. § 103 as being unpatentable over Lin in view of Lijten.

#### OPINION

The aforementioned rejection is affirmed as to claims 4, 14, 15, 17, 20 and 21, and reversed as to claims 2, 3, 9 and 10.

The appellants state that the claims stand or fall in two groups: 1) claims 4, 14, 15, 17, 20 and 21, and 2) claims 2 and 3

---

<sup>1</sup> The examiner and the appellants should address whether the appellants' disclosure of percent sheath upper limits of about 15 wt%, about 30 wt% and about 90 wt% (specification, page 8, line 17 - page 9, line 2) provides adequate written descriptive support for the upper limit of about 9 percent recited in the appellants' claim 20.

(brief, page 5).<sup>2</sup> The rejection is affirmed only as to the claims in the first group. We limit our discussion of the rejection of the claims in the first group to one claim, i.e., claim 20. See *In re Ochiai*, 71 F.3d 1565, 1566 n.2, 37 USPQ2d 1127, 1129 n.2 (Fed. Cir. 1995); 37 CFR § 1.192(c)(7) (1997).

*Rejection of claim 20*

Lin discloses an acid-dye and coffee stain resistant carpet (col. 1, lines 7-10; col. 2, lines 52-56; col. 6, lines 20-22) comprising a backing material tufted with stain resistant sheath/core bicomponent face fibers (col. 1, lines 7-9; col. 2, lines 54-56). The weight ratio of the sheath to the core can be 10:90 (col. 1, lines 41-42). Hence, the fiber can be 10 wt% sheath, which either falls within the about 9% recited in the appellants' claim 20 or is sufficiently close to about 9% that it would have fairly suggested, to one of ordinary skill in the art, that amount of sheath. See *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 783, 227 USPQ 773, 779 (Fed. Cir. 1985). The face fibers comprise a core of a first polyamide component which can be nylon 6 or nylon 6,6 (col. 1, lines 39-40), which are the

---

<sup>2</sup> Claim 9, which depends from claim 3, and claim 10, which depends from claim 9, and which are omitted from the appellants' grouping of claims, are considered to stand or fall with the claims in the second group.

appellants' most preferred core polyamides (specification, page 9, lines 19-20), covered by a sheath which can be nylon 6,12 (col. 1, lines 43-47), which is the appellants' most preferred sheath polyamide (specification, page 11, line 17). Because Lin's nylon 6, nylon 6,6 and nylon 6,12 are the same polyamides as those of the appellants, they necessarily have the compatibility, percent steam heatsetting shrinkage and staining depth recited in the appellants' claim 20. "Products of identical chemical composition can not have mutually exclusive properties." *In re Spada*, 911 F.2d 705, 708, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Lin states that the fibers can be substantially eccentric (col. 2, lines 14-19), which indicates that they can be non-round. Moreover, Lijten teaches that carpet fibers having a trilobal cross-section, which is the appellants' preferred fiber cross-section (specification, page 14, line 10), are preferred due to their visual effect and properties such as adhesivity (col. 3, lines 16-21). Although round fibers are used in Lin's examples (col. 5, line 21), the reference does not limit the fiber cross-section to one which is round. Hence, one of ordinary skill in the art would have been led by Lijten to use trilobal cross-section fibers in Lin's carpet to obtain the

benefits of trilobal cross-section fibers disclosed by Lijten.

We therefore conclude that the carpet recited in the appellants' claim 20 would have been *prima facie* obvious to one of ordinary skill in the art over the applied prior art.

The appellants argue that the improved dyeability provided by Lijten's sheath (col. 4, lines 12-13) is diametrically opposed to the objective of Lin (brief, page 9). Lijten's disclosure, however, of the benefits of trilobal fibers in carpet (col. 3, lines 16-21), is applicable to trilobal fibers generally, regardless of whether a sheath on the fibers is dyeable or dye resistant.

The appellants argue that the claimed carpet provides surprising results with respect to heatset shrinkage and stain resistance (brief, pages 11-12). This argument is not well taken because the appellants have not provided a side-by-side comparison of the claimed invention with the closest prior art which is commensurate in scope with the claims, and explained why the results would have been unexpected by one of ordinary skill in the art. See *In re Baxter Travenol Labs.*, 952 F.2d 388, 392, 21 USPQ2d 1281, 1285 (Fed. Cir. 1991); *In re De Blauwe*, 736 F.2d 699, 705, 222 USPQ 191, 196 (Fed. Cir. 1984); *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 778 (Fed. Cir. 1983); *In re*



*Clemens*, 622 F.2d 1029, 1035, 206 USPQ 289, 296 (CCPA 1980); *In re Freeman*, 474 F.2d 1318, 1324, 177 USPQ 139, 143 (CCPA 1973); *In re Klosak*, 455 F.2d 1077, 1080, 173 USPQ 14, 16 (CCPA 1972).

For the above reasons we conclude that the carpet claimed in the appellants' claim 20 would have been obvious to one of ordinary skill in the art within the meaning of 35 U.S.C. § 103.

*Rejection of claims 2, 3, 9 and 10*

The examiner argues that because Lin's nylon 6, nylon 6,6 and nylon 6,12 are the same as those used by the appellants, the fibers of Lin and the appellants inherently have the same number of titratable amino end groups, i.e., less than 30 milliequivalents per kilogram (answer, page 8). Lin's example 2, wherein the core is nylon 6,6, the sheath is nylon 6,12, and the concentration of titratable amino end groups is about 50 milliequivalents per kilogram (col. 5, lines 6-8 and 14-15), indicates that the examiner is incorrect. The appellants obtain their level of titratable amino end groups by reacting amino end groups with blocking agents (specification, page 11, line 18 - page 13, line 15). The examiner has not established that the applied prior art discloses, or would have fairly suggested to one of ordinary skill in the art, providing a sheath having less than 30 milliequivalents per kilogram of titratable amino end

Appeal No. 2001-2386  
Application 08/715,724

groups either by blocking amino end groups or by another method. The examiner, therefore, has not carried the burden of establishing a *prima facie* case of obviousness of the carpet recited in the appellants' claim 2 and claims 3, 9 and 10 which depend directly or indirectly therefrom.


#### DECISION

The rejection of claims 2-4, 9, 10, 14, 15, 17, 20 and 21 stand rejected under 35 U.S.C. § 103 over Lin in view of Lijten is affirmed as to claims 4, 14, 15, 17, 20 and 21, and reversed as to claims 2, 3, 9 and 10.

Appeal No. 2001-2386  
Application 08/715,724

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

*AFFIRMED-IN-PART*

  
CHUNG K. PAK  
Administrative Patent Judge

*Terry J. Owens*  
TERRY J. OWENS  
Administrative Patent Judge

  
PAUL LIEBERMAN  
Administrative Patent Judge

BOARD OF PATENT  
APPEALS AND  
INTERFERENCES

Appeal No. 2001-2386  
Application 08/715,724

KAREN M. DELLERMAN  
BASF CORPORATION  
26 DAVID DRIVE  
RESEARCH TRIANGLE PARK, NC 27709

TJO:cae